App. Ser. No. 10/645,520 Atty. Dkt. No.: 080437.52615US

PATENT

IN THE CLAIMS:

Please amend the claims as follows:

1-4. (canceled)

5. (currently amended) The A fuel cell according to Claim 2, wherein comprising:

at least one individual cell with an electrolyte/electrode unit, and
at least one conducting end or intermediate plate via which a gaseous
reactant can be supplied to at least one electrode of the at least one individual
cell at least in one inlet region, wherein

the end or intermediate plate is designed to incorporate a heat exchanger which removes heat from an anode side of the at least one individual cell.

the end or intermediate plate comprises air conducting channels or guiding areas configured in such a way that the gaseous reactant flows directly along the anode side and is subsequently supplied to a cathode inlet region,

the end or intermediate plate is composed of at least two substantially identical or mirror-image partial elements, wherein at least one section of the heat exchanger is incorporated between the at least two partial elements, and wherein said at least one section is connected in terms of flow with the cathode inlet region with respect to which the anode section is separated in terms of flow.

App. Ser. No. 10/645,520 Atty. Dkt. No.: 080437.52615US PATENT

6. (currently amended) The A fuel cell according to Claim 5, wherein comprising:

at least one individual cell with an electrolyte/electrode unit, and

at least one conducting end or intermediate plate via which a gaseous

reactant can be supplied to at least one electrode of the at least one individual

cell at least in one inlet region, wherein

the end or intermediate plate is designed to incorporate a heat exchanger which removes heat from an anode side of the at least one individual cell.

the end or intermediate plate comprises air conducting channels or guiding areas configured in such a way that the gaseous reactant flows directly along the anode side and is subsequently supplied to a cathode inlet region,

the end or intermediate plate is composed of at least two partial elements, wherein at least one section of the heat exchanger is incorporated between the at least two partial elements, and wherein said at least one section is connected in terms of flow with the cathode inlet region with respect to which the anode section is separated in terms of flow, and

a baffle is introduced between the at least two partial elements such that, in the heat exchanger, two partial flow regions, through which flow occurs successively and in opposite directions, develop.

7. (original) The fuel cell according to Claim 6, wherein individual partial elements of the at least one end or intermediate plate comprise spacer elements

App. Ser. No. 10/645,520

Atty. Dkt. No.: 080437.52615US

PATENT

so that the individual partial elements are arranged at a distance from an anode and a cathode of individual cells while forming flow regions.

8. (original) The fuel cell according to Claim 7, wherein the spacer elements are nubs.

9. (original) The fuel cell according to Claim 8, wherein the nubs are produced through an embossing or deposition method.

10. (original) The fuel cell according to Claim 9, wherein surfaces of the nubs come into contact with the baffle and have good electric interconnection with the baffle.

11. (currently amended) The fuel cell according to Claim <u>5</u> 1, wherein said at least one individual cell includes a first individual cell and a second individual cell, wherein the plate is an intermediate plate interposed between the first individual cell and the second individual cell, and wherein the heat exchanger is incorporated, in terms of flow, between an anode flow region of the first individual cell and a cathode flow region of the second individual cell.

App. Ser. No. 10/645,520 Atty. Dkt. No.: 080437.52615US PATENT

12. (currently amended) A fuel cell operating process comprising:
supplying a gaseous reactant to at least one electrode of at least one
individual cell at least in one inlet region by way of at least one conducting end
or intermediate plate, and

removing heat from an anode side of the at least one individual cell by a heat exchanger incorporated in the end or intermediate plate.

wherein the end or intermediate plate is composed of at least two
substantially identical or mirror-image partial elements, wherein at least one
section of the heat exchanger is incorporated between the at least two partial
elements, and wherein said at least one section is connected in terms of flow with
a cathode inlet region with respect to which the anode section is separated in
terms of flow.